



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
MISSOURI OIL AND GAS COUNCIL

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

*old well  
completion form  
Drilled  
Well Compl.*

FORM OGC 3

<input checked="" type="checkbox"/> APPLICATION TO DRILL		<input type="checkbox"/> DEEPEN	<input type="checkbox"/> PLUG BACK	<input checked="" type="checkbox"/> FOR AN OIL WELL		<input type="checkbox"/> OR GAS WELL	
NAME OF COMPANY OR OPERATOR <b>D.E. Exploration, Inc.</b>				DATE <b>06/09/99</b>			
ADDRESS <b>618 Main Po Box 128</b>		CITY <b>Wellsville</b>		STATE <b>KS</b>		ZIP CODE <b>66092</b>	
<b>DESCRIPTION OF WELL AND LEASE</b>							
NAME OF LEASE <b>Belton Unit-Abbey Dunlap</b>		WELL NUMBER <b>AD-22</b>		ELEVATION (GROUND) <b>1079</b>			
WELL LOCATION (GIVE FOOTAGE FROM SECTION LINE) <b>1540</b> FT. FROM (N)(S) SECTION LINE <b>1100</b> FEET FROM (E)(W) SECTION LINE							
WELL LOCATION <b>SE 1/4</b>		SECTION <b>09</b>		TOWNSHIP <b>46N</b>		RANGE <b>33W</b>	
				COUNTY <b>Cass</b>			
NEAREST DISTANCE FROM PROPOSED LOCATION TO PROPERTY OR LEASE LINE <b>660</b> FEET							
DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING, COMPLETED OR APPLIED — FOR WELL ON THE SAME LEASE — <b>220</b> FEET							
PROPOSED DEPTH <b>650'</b>		DRILLING CONTRACTOR, NAME AND ADDRESS <b>Hughes Drilling, Co.</b>		ROTARY OR CABLE TOOLS <b>Rotary</b>		APPROX. DATE WORK WILL START <b>06/14/99</b>	
NUMBER OF ACRES IN LEASE <b>560</b>		NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL, COMPLETED IN OR DRILLING TO THIS RESERVOIR <b>28</b>					
		NUMBER OF ABANDONED WELLS ON LEASE <b>0</b>					
IF LEASE PURCHASED WITH ONE OR MORE WELLS DRILLED, FROM WHOM PURCHASED? NAME <b>E.W. Stallings/Western Engineering</b> ADDRESS _____				NO. OF WELLS: PRODUCING <b>20</b> INJECTION <b>7</b> INACTIVE <b>15</b> ABANDONED <b>0</b>			
STATUS OF BOND		<input type="checkbox"/> SINGLE WELL AMOUNT \$ _____		<input checked="" type="checkbox"/> BLANKET BOND AMOUNT \$ <b>20,000.00</b>		<input checked="" type="checkbox"/> ON FILE <input type="checkbox"/> ATTACHED	
REMARKS: (IF THIS IS AN APPLICATION TO DEEPEN OR PLUG BACK, BRIEFLY DESCRIBE WORK TO BE DONE, GIVING PRESENT PRODUCING ZONE AND EXPECTED NEW PRODUCING ZONE; USE BACK OF FORM IF NEEDED.)							
<b>PROPOSED CASING PROGRAM</b>				<b>APPROVED CASING — TO BE FILLED IN BY STATE GEOLOGIST</b>			
AMOUNT	SIZE	WT/FT	CEM.	AMOUNT	SIZE	WT/FT	CEM.
<b>650'</b>	<b>4.5"</b>		<b>650</b>	<b>114 sacks 650'</b>	<b>4.5"</b>		<b>To surface</b>
I, the undersigned, state that I am the <b>President</b> of the <b>D.E. Exploration, Inc.</b> (company), and that I am authorized by said company to make this report, and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct, and complete to the best of my knowledge.							
SIGNATURE <i>Douglas G. Turner</i> <b>Per</b>				DATE <b>06-09-99</b>			
PERMIT NUMBER <b>20673</b>				<input checked="" type="checkbox"/> DRILLER'S LOG REQUIRED <input checked="" type="checkbox"/> E-LOGS REQUIRED IF RUN			
APPROVAL DATE <b>6-15-99</b>				<input checked="" type="checkbox"/> CORE ANALYSIS REQUIRED IF RUN <input checked="" type="checkbox"/> DRILL STEM TEST INFO. REQUIRED IF RUN			
APPROVED <i>Jane Holey Williams</i> <b>OK</b>				<input type="checkbox"/> SAMPLES REQUIRED			
				<input checked="" type="checkbox"/> SAMPLES NOT REQUIRED			
				<input type="checkbox"/> WATER SAMPLES REQUIRED AT _____			
<b>NOTE ► THIS PERMIT NOT TRANSFERABLE TO ANY OTHER PERSON OR TO ANY OTHER LOCATION</b>							
APPROVAL OF THIS PERMIT BY THE OIL AND GAS COUNCIL DOES NOT CONSTITUTE ENDORSEMENT OF THE GEOLOGIC MERITS OF THE PROPOSED WELL NOR ENDORSEMENT OF THE QUALIFICATIONS OF THE PERMITTEE.							
I _____ of the _____ Company confirm that an approved drilling permit has been obtained by the owner of this well. Council approval of this permit will be shown on this form by presence of a permit number and signature of authorized council representative.							
DRILLER'S SIGNATURE _____				DATE _____			



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
MISSOURI OIL AND GAS COUNCIL  
**WELL LOCATION PLAT**

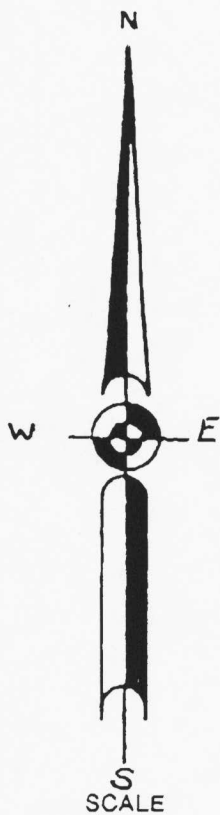
FORM OGC-4

OWNER  
**D.E.Exploration, Inc.**

LEASE NAME  
**Belton Ubit-Abbey Dunlap**

COUNTY  
**Cass**

**1540** FEET FROM **S** SECTION LINE AND **1100** FEET FROM **E** SECTION LINE OF SEC. **09**, TWP **46N**, RANGE **33W**



1 square = 440'


AD-22

REMARKS

**INSTRUCTIONS**

On the above plat, show distance of the proposed well from the two nearest section lines, the nearest lease line, and from the nearest well on the same lease completed in or drilling to the same reservoir. Do not confuse survey lines with lease lines. See rule 10 CSR 50-2.030 for survey requirements. Lease lines must be marked.

This is to Certify that I have executed a survey to accurately locate oil and gas wells in accordance with 10 CSR 50-2.030 and that the results are correctly shown on the above plat.

(SEAL)

REMIT TWO (2) COPIES TO:  
MISSOURI OIL AND GAS COUNCIL  
P.O. BOX 250, ROLLA, MO 65401

REGISTERED LAND SURVEYOR

NUMBER



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
MISSOURI OIL AND GAS COUNCIL  
WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

Form OGC-5

☒ NEW WELL ☐ WORKOVER ☐ DEEPEN ☐ PLUG BACK ☐ INJECTION ☐ SAME RESERVOIR ☐ DIFFERENT RESERVOIR ☒ OIL ☐ GAS ☐ DRY

OWNER D.E.Exploration, Inc.		ADDRESS PO Box 128, Wellsville, KS 66092	
LEASE NAME Belton Unit-Abbey Dunlap		WELL NUMBER AD-22	
LOCATION 1540 from S. line 1100 from E. line		SEC. TWP. AND RANGE OR BLOCK AND SURVEY 09 46N 33W	
COUNTY Cass	PERMIT NUMBER (OGC-3 OR OGC-3I) 20673		
DATE SPUDDED 06/13/99	DATE TOTAL DEPTH REACHED 06/18/99	DATE COMPLETED READY TO PRODUCE OR INJECT 08/05/99	ELEVATION (DF, RKR, RT, OR Gr.) in 1079.30
TOTAL DEPTH 660'	PLUG BACK TOTAL DEPTH N/A		
PRODUCING OR INJECTION INTERVAL(S) FOR THIS COMPLETION producing		ROTARY TOOLS USED (INTERVAL) top to bottom	CABLE TOOLS USED (INTERVAL) N/A
WAS THIS WELL DIRECTIONALLY DRILLED? No	WAS DIRECTIONAL SURVEY MADE? No	WAS COPY OF DIRECTIONAL SURVEY FILED? No	DATE FILED NO
TYPE OF ELECTRICAL OR OTHER LOGS RUN (LIST LOGS FILED WITH THE STATE GEOLOGIST) Gamma Ray			DATE FILED 07/16/99

## CASING RECORD

CASING (REPORT ALL STRINGS SET IN WELL - CONDUCTOR, SURFACE, INTERMEDIATE, PRODUCING, ETC.)

PURPOSE	SIZE HOLE DRILLED	SIZE CASING SET	WEIGHT (LB. FT)	DEPTH SET	SACKS CEMENT	AMOUNT PULLED
surface	12 3/4	7"		23.	4 sks	
product.	6 1/4	4 1/2		650.20		

## TUBING RECORD

## LINER RECORD

SIZE	DEPTH SET	PACKER SET AT	SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
7" IN.	23. FEET	N/A FEET	N/A INCH	N/A FEET	N/A FEET	N/A	

## PERFORATION RECORD

## ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

NUMBER PER FEET	SIZE AND TYPE	DEPTH INTERVAL	AMOUNT AND KIND OF MATERIAL USED	DEPTH INTERVAL
2	3 1/8 Jt-x	644-650	20/40 Frac Sand	

## INITIAL PRODUCTION

DATE OF FIRST PRODUCTION OR INJECTION		PRODUCING METHOD (INDICATE IF FLOWING, GAS LIFT, OR PUMPING - IF PUMPING, SHOW SIZE AND TYPE OF PUMP.)					
DATE OF TEST N/A	HOURS TESTED N/A	CHOKE SIZE N/A	OIL PRODUCED DURING TEST N/A bbls.	GAS PRODUCED DURING TEST N/A MCF	WATER PRODUCED DURING TEST N/A bbls.	OIL GRAVITY API (CORR.)	
TUBING PRESSURE	CASING PRESSURE	CALC'D RATE OF PRODUCTION PER 24 HOURS		OIL bbls.	GAS MCF	WATER bbls.	GAS OIL RATIO

DISPOSITION OF GAS (STATE WHETHER VENTED, USED FOR FUEL OR SOLD)

held in with pressure valve

METHOD OF DISPOSAL OF MUD PIT CONTENTS

air dried and back filled

CERTIFICATE: I, THE UNDERSIGNED, STATE THAT I AM THE President OF THE D.E.Exploration, Inc. COMPANY, AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT, AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE, CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DATE 10-20-99 SIGNATURE [Signature] Pres.

CONTRACTOR

6/13/99-6/18/99

OPERATOR

HUGHES DRILLING COMPANY  
122 NORTH MAIN  
WELLSVILLE, KANSAS 66092

D. E. Exploration, Inc.  
P. O. Box 128  
Wellsville, Kansas 66092

LOG  
Belton Unit  
Well # AD-22

API #

STRATA THICKNESS	FORMATION DRILLED	T.D.	STRATA THICKNESS	FORMATION DRILLED	T.D.
2	Soil	2	3	Gray Sand	451
5	Clay	7	18	Shale	469
36	Lime(Bkn. 7-41) (Clay 15-18)	43	5	Lime	474
31	Shale	74	27	Shale (Slate 478-479)	501
10	Lime	84	3	Gray Sand	504
5	Shale	89	8	Sdy. Shale	512
6	Red Bed	95	2	Gray Sand	514
6	Shale	101	3	Sdy. Shale	517
4	Lime	105	1	Sand	518
21	Shale (Slate 108-109)	126	2	Sdy. Shale	520
17	Gray Sand	143	1	Brk. Sand	521
14	Shale	157	2	Sdy. Lime	523
1	Lime	158	53	Sand	576
9	Shale	167	3	Shale	579
29	Lime 30'	196	1	Sand	580
7	Shale (Slate 197-198)	203	3.5	Sdy. Shale	583.5
19	Lime 20'	222	29	Sand	612.5
5	Shale (Slate 226-227)	227	1.5	Sdy. Lime	614
2	Lime	229	19	Shale (Slate 617-617.5)	633
3	Shale	232	4	Shale	637
7	Lime "HERTHA"	239	1	Lime	638
108	Shale (Brk. 242-245)	347	22	Shale (Slate 642-643) (Slate 651-652)	660T.D.
5	Sand (Gray)	352	6/13/99-6/18/99 Drilled 660' of hole (6½") 6/13/99 Set 23' of 7" surface pipe. Cemented in with 4 sacks cement. 6/15/99 Cored Squirrel Zone--5 cores. 6/18/99 Set 650.20' of 4½" pipe. Used 3 centralizers. Float shoe on bottom.		
68	Shale	420			
4	Lime	424			
2	Shale	426			
5	Lime	431			
8	Shale	439			
7	Lime	446			
2	Shale	448			

NOV 01 1999



**CONSOLIDATED  
INDUSTRIAL  
SERVICES**  
AN INFINITY COMPANY  
211 W. 14th, P.O. Box 884 Chanute, KS 66720 • 319/431-9210 • 1-800/467-8976

INVOICE DATE	09/09/99
INVOICE NO.	00164472

**TERMS: Net 30 Days**  
A Finance Charge computed at 1% per month (annual percentage rate of 12%) will be added to balances over 30 days.

S  
O  
L  
D  
DATE: 09/09/99  
BY: [Signature]

PLEASE REFER TO THIS ACCOUNT NUMBER WHEN MAKING INQUIRIES

JOINT NO. 2355      "O" NO. 2018      LOCATION 10      LEASE AND WELL NO. GELTON UNIT # AD-22

ITEM NUMBER	DESCRIPTION	DATE OF JOB	JOBTICKET NO.	EXTENDED PRICE
		09/05/1999	14953	
159	7/8" RUBBER SEAL SEALERS (SP 1.3)	15.0000	1.6500	24.75
231	FRAC GEL	153.0000	3.4000	516.95
501	WATER TRANSPORT	17.0000	60.0000	1020.00
501	WATER TRANSPORT	7.0000	60.0000	420.00
161	20/40 FRAC SAND	6.0000	7.7500	46.50
192	12/20 MESH	84.0000	10.5000	882.00
169	BULK SAND DELIVERY	1.0000	100.0000	100.00
TOTAL				1997.14
TAX				26.74
TOTAL DUE				2023.88

Thank You!



# CONSOLIDATED INDUSTRIAL SERVICES

AN INFINITY COMPANY

211 W. 14th, P.O. Box 864 Chanute, KS 66620 • 316/431-8210 • 1-800-467-8676

INVOICE DATE	04/09/99
INVOICE NO.	00164472

S 2355  
O S.E. EPHRAIM  
L P.O. BOX 321  
D WELLSVILLE KS 64692

**TERMS: Net 30 Days**  
A Finance Charge computed at 1% per month (annual percentage rate of 12%) will be added to balances over 30 days.

PLEASE REFER TO THIS ACCOUNT NUMBER WHEN MAKING INQUIRIES

ACCOUNT NO.	P.O. NO.	LOCATION	LEASE AND WELL NO.	DATE OF JOB	JOB TICKET NO.	EXTENDED PRICE
2355	0018	10	DELTA UNIT 8 AD-22	04/05/1999	10013	
ITEM NUMBER	DESCRIPTION	UNIT PRICE	UNIT MEAS	EXTENDED PRICE		
5100	MANTAIN PUMP CHARGE (LOWER ZONE)	1.0000	EA	1000.00		
5102	MANTAIN PUMP CHARGE (MID-ZONE)	1.0000	EA	750.00		
5102	MANTAIN PUMP CHARGE (UPPER-ZONE)	1.0000	EA	500.00		
1208	BREATER	.3750	EA	48.75		
1123	CITY WATER (BACTRUS)	5.5000	EA	65.00		
1123	CITY WATER (OTTAWA)	10.0000	EA	50.00		
1123	CITY WATER (CHANUTE)	10.0000	EA	50.00		
3304C	ACID SPOTTER	225.0000	EA	225.00		
5100	ACID SPOTTER	75.0000	EA	75.00		
5100	ACID SPOTTER	50.0000	EA	50.00		
2107	15# HCL	.7000	EA	105.00		
1215	KCL 500	23.9500	EA	790.25		
1145	7/8" FLOATING BALL SEALERS	4.1500	EA	195.05		

(continued on next page)

SS INVOICE	TAX	OFFICE COPY
------------	-----	-------------

Thank You!

PLEASE PAY

CONSOLIDATED INDUSTRIAL SERVICES, INC.  
211 W. 14TH STREET, CHANUTE, KS 66720  
316-431-9210 OR 800-457-8678

TICKET NUMBER 10953

LOCATION W. of Belton Mo.  
D+58-3/4 E-N. side

1 of 2

## FIELD TICKET

DATE 8-5-99	CUSTOMER ACCT # 2355	WELL NAME Belton Unit #ADAA	QTR/QTR	SECTION	TWP	RGE	COUNTY GROSS	FORMATION sgu
CHARGE TO D.E. Explor.			OWNER					
MAILING ADDRESS			OPERATOR					
CITY & STATE			CONTRACTOR					

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION OF SERVICES OR PRODUCT	UNIT PRICE	TOTAL AMOUNT
5102	1	PUMP CHARGE 1300HP- (Lower zone)		1000.00
5106	1	1300HP- (Midzone)		750.00
		HYDRAULIC HORSE POWER		
5107	1	1300HP (Upper zone)		500.00
1208	3 pts	breaker		48.75
1123	6,500 gal.	city wtr. - Bucyrus		65.00
1123.20	5,000 gal.	city wtr. - Ottawa		50.00
1123	5,000 gal.	city wtr. - Chanute		50.00
5301C	3	Acid Spots	225.00, 75.00, 50.00	350.00
3107	150 gal.	15% HCL		105.00
1215	33 gal.	ESA 55		790.75
4145	47	Ball Sealers (Floaters)		195.25
4139	35	Ball Sealers (Sinkers)		57.75
1231	150	Frac Gel		510.00
		STAND BY TIME		
		MILEAGE		
5501	17 hrs.	WATER TRANSPORTS		1020.00
5501.20	7 hrs.	WAGGON/TRANSPORT (Ottawa)		420.00
2101	6 sx	FRAC SAND 20/40		46.50
2102	84 sx	12/30		882.50
		CEMENT		
			Tax	26.74
		NITROGEN		
5109	112 mi	TON-MILES		100.00
ESTIMATED TOTAL				6967.14

CUSTOMER or AGENTS SIGNATURE

CIS FOREMAN

Jerry L. Lester

CUSTOMER or AGENT (PLEASE PRINT)

DATE

1104472

CONSOLIDATED INDUSTRIAL SERVICES, INC.  
211 W. 14TH STREET, CHANUTE, KS 66720  
316-431-9210 OR 800-487-8876

TICKET NUMBER 11680

LOCATION W. of Belton Mo.  
D-58-3/4 E. N. 3120  
FOREMAN Jerry Lester

TREATMENT REPORT

DATE	CUSTOMER ACCT #	WELL NAME	CTR/CTA	SECTION	TWP	RGE	COUNTY	FORMATION
8-5-99		Belton Unit #202A					Cass	sgl - middle
CHARGE TO <u>D.E. Explor. % Doug Evans</u>				OWNER				
MAILING ADDRESS				OPERATOR				
CITY				CONTRACTOR				
STATE				DISTANCE TO LOCATION				
ZIP CODE				TIME LEFT LOCATION				
TIME ARRIVED ON LOCATION								

WELL DATA	
HOLE SIZE	
TOTAL DEPTH	
CASING SIZE	4 1/2
CASING DEPTH	61 577
CASING WEIGHT	
CASING CONDITION	
TUBING SIZE	
TUBING DEPTH	
TUBING WEIGHT	
TUBING CONDITION	
PACKER DEPTH	
PERFORATIONS	555-76
SHOTS/FT	42 SA
OPEN HOLE	
TREATMENT VIA	Tubing

TYPE OF TREATMENT	
<input type="checkbox"/> SURFACE PIPE	<input type="checkbox"/> ACID BREAKDOWN
<input type="checkbox"/> PRODUCTION CASING	<input type="checkbox"/> ACID STIMULATION
<input type="checkbox"/> SQUEEZE CEMENT	<input checked="" type="checkbox"/> ACID SPOTTING
<input type="checkbox"/> PLUG & ABANDON	<input checked="" type="checkbox"/> FRAC
<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> FRAC + NITROGEN
<input type="checkbox"/> MISC PUMP	<input type="checkbox"/> FOAM FRAC
<input type="checkbox"/> OTHER	<input type="checkbox"/> NITROGEN

PRESSURE LIMITATIONS		
	THEORETICAL	INSTRUCTED
SURFACE PIPE		
ANNULUS LONG STRING		
TUBING		

INSTRUCTIONS PRIOR TO JOB Spot 50 gal. 15% HCL. Break down and stage acid - establish max rate -  
pump 15-20 bbl. prod. 800" sand - balls. 800" sand - balls. 800" sand - balls. 600" sand - flush  
to perfs plus 10 over.

JOB SUMMARY

DESCRIPTION OF JOB EVENTS Spotted 50 gal. 15% HCL. Break down (No break) ran logger in to check  
on B.P. - B.P. OK - loaded hole - established max rate - pumped 20 gal. prod. 300" 2 1/2 - 500"  
10/20 - 12 Balls - 800" 12/20 - 12 Balls - 800" 12/20 - 11 Balls - 600" 12/20 - flushed to perfs plus 10  
bbl. over. -  
Flowed back to pit & washed off B.P.

PRESSURE SUMMARY	
BREAKDOWN or CIRCULATING	0 PSI
FINAL DISPLACEMENT	1000 PSI
ANNULUS	1000 PSI
MAXIMUM	500 PSI
MINIMUM	250 PSI
AVERAGE	250 PSI
ISIP	250 PSI
5 MIN SIP	250 PSI
15 MIN SIP	250 PSI

TREATMENT RATE	
BREAKDOWN BPM	
INITIAL BPM	20
FINAL BPM	11
MINIMUM BPM	11
MAXIMUM BPM	11
AVERAGE BPM	11
HYD HHP = RATE X PRESSURE X 40.8	

AUTHORIZATION TO PROCEED

TITLE

DATE

ALL THE TERMS AND CONDITIONS STATED ON THE REVERSE SIDE ARE INCORPORATED AS PART OF THIS SALE.

CONSOLIDATED INDUSTRIAL SERVICES, INC.  
211 W. 14TH STREET, CHANUTE, KS 66720  
316-431-9210 OR 800-467-8878

## TREATMENT REPORT

TICKET NUMBER 11682

LOCATION West Belton No. -  
0+58-3/4E - N. side  
FOREMAN Jerry Hester

DATE	CUSTOMER ACCT #	WELL NAME	QTR/GTR	SECTION	TWP	RGE	COUNTY	FORMATION
8-6-99		Belton Unit #2002					COSE	SGU - upper
CHARGE TO <u>D.E. Explor. Co Doug Evers</u>				OWNER				
MAILING ADDRESS				OPERATOR				
CITY				CONTRACTOR				
STATE				DISTANCE TO LOCATION				
ZIP CODE				TIME LEFT LOCATION				
TIME ARRIVED ON LOCATION								

WELL DATA	
HOLE SIZE	
TOTAL DEPTH	
CASING SIZE	4 1/2
CASING DEPTH	B.P.
CASING WEIGHT	
CASING CONDITION	
TUBING SIZE	
TUBING DEPTH	
TUBING WEIGHT	
TUBING CONDITION	
PACKER DEPTH	
PERFORATIONS	524-49
SHOTS/FT	38 sh
OPEN HOLE	
TREATMENT VIA	Casing

TYPE OF TREATMENT	
<input type="checkbox"/> SURFACE PIPE	<input type="checkbox"/> ACID BREAKDOWN
<input type="checkbox"/> PRODUCTION CASING	<input type="checkbox"/> ACID STIMULATION
<input type="checkbox"/> SQUEEZE CEMENT	<input checked="" type="checkbox"/> ACID SPOTTING
<input type="checkbox"/> PLUG & ABANDON	<input checked="" type="checkbox"/> FRAC
<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> FRAC + NITROGEN
<input type="checkbox"/> MISC PUMP	<input type="checkbox"/> FOAM FRAC
<input type="checkbox"/> OTHER	<input type="checkbox"/> NITROGEN

PRESSURE LIMITATIONS		
	THEORETICAL	INSTRUCTED
SURFACE PIPE		
ANNULUS LONG STRING		
TUBING		

INSTRUCTIONS PRIOR TO JOB: Spot 50 gal 15% HCL - Break down and stage acid - establish max rate - pump 15-20 bbl pad - 800" sand - balls - 800" sand - balls - 800" sand - balls - 600" sand - flush to parts plus 10 gal over.

## JOB SUMMARY

DESCRIPTION OF JOB EVENTS: Spotted 50 gal 15% HCL - Break down and stage acid - established max rate - pumped 20 bbl pad - 800" 12/20 - 7 balls - 800" 12/20 - 5 balls - 800" 12/20 - 600" 12/20 - flushed to parts plus 10 gal over.

PRESSURE SUMMARY	
BREAKDOWN or CIRCULATING	1200 psi
FINAL DISPLACEMENT	2400 psi
ANNULUS	
MAXIMUM	2500 psi
MINIMUM	1200 psi
AVERAGE	
ISIP	250 psi
5 MIN SIP	
15 MIN SIP	

TREATMENT RATE	
BREAKDOWN BPM	
INITIAL BPM	20
FINAL BPM	19
MINIMUM BPM	19
MAXIMUM BPM	20
AVERAGE BPM	
HYD HHP = RATE X PRESSURE X 40.8	

AUTHORIZATION TO PROCEED

TITLE

DATE

ALL THE TERMS AND CONDITIONS STATED ON THE REVERSE SIDE ARE INCORPORATED AS PART OF THIS SALE.